

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

**Claim 1 (currently amended):** A semiconductor device module structure comprising:

- a high-resistance layer of a first conductive type;
- a base layer of a second conductive type formed in an upper part of the high-resistance layer of the first conductive type;
- an emitter region of the first conductive type formed in an upper part of the base layer of the second conductive type;
- an emitter electrode connected to the emitter region;
- an insulated gate electrode adjacent to the base layer of the second conductive type;
- a guard ring part formed around a cell region including the emitter region;
- a buffer layer of the first conductive type formed on an underside of the high-resistance layer of the first conductive type;
- a collector layer of the second conductive type formed on an underside of the buffer layer of the first conductive type;
- a collector electrode connected to the collector layer; and

a metal flat plate upper heat-sinking part connected to the emitter electrode,

wherein the guard ring part comprises:

a semiconductor layer of the second conductive type disposed on the upper part of the high-resistance high-resistance layer of the first conductive type and located around the emitter region;

an insulating layer formed on an upper part of the semiconductor layer of the second conductive type; and

a passivation layer covering the insulating layer without covering the cell region,

wherein a gap is formed between the passivation layer and the upper heat-sinking part such that the passivation layer does not directly contact the upper heat-sinking part.

**Claim 2 (previously presented):** The semiconductor device module structure of claim 1, wherein the semiconductor device module structure comprises a diode part, and wherein a cathode electrode located in an upper part of the diode part between the high-resistance layer and the upper heat-sinking part is connected to the upper heat-sinking part.

**Claim 3 (previously presented):** The semiconductor device module structure of claim 1, wherein one end of the metal flat plate upper heat-sinking part is connected to the emitter electrode and the opposite end of the metal flat plate heat-sinking part is connected to a substrate.

**Claim 4 (previously presented):** The semiconductor device module structure of claim 1, wherein the first conductive type is either an N-type or an N<sup>+</sup>-type, and wherein the second conductive type is either a P-type or a P<sup>+</sup>-type.